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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,010	06/26/2001	Xuemin Chen	45463/JEJ/B600	1542

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CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER	
HANEY, MATTHEW J	
ART UNIT	**PAPER NUMBER**
2613	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,010	CHEN, XUEMIN	
	Examiner	Art Unit	
	Matthew Haney	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) *2,12,20 and 31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-11,13-19,21-30 and 32-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the amendment filed by the applicant.

Response to Amendment

1. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection. The Examiner notes that Applicant simply placed claim 2 within claim 1 and added the limitation that both the second bitstream and second VOP must be temporally enhanced. The Examiner points out that claims 1 and 2 were already addressed in the previous office action and the new limitation has been addressed in the rejection included with this office action. Also, the applicant's argument that the two references used in the 35 USC 103 rejection are not combinable will now be addressed. The Examiner would like to point out that Tan's (US 6,542,549) invention can be used in field of multimedia audio-visual coding and compression techniques where the encoder needs to regulate the complexity requirements of the bitstream it generates (Column 1, Lines 11-19). In that respect, Radha (US 6,639,943) cites different examples throughout his disclosure where the encoder is changed so that a lower complexity can be reached (Column 4, Lines 42-52, Column 7, Lines 36-45, and Column 11, Lines 9-23 which shows an example of a decoder that provides hybrid scalability like the others within Radha but which shares a motion compensator so that complexity can be reduced), therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the two references. Also, the Applicants argument that the second DTS and PTS are not equal will also be addressed. The Examiner agrees that the two examples cited by the

applicant are true, however, the Examiner notes that for P-VOP 3 the DTS_3 = the PTS_2 for the said VOP and the same is true for the VOP that is the last example on Figure 6. So, although, Tan (US 6,542,549) does not us set them equal in every instance, this is merely because there is sufficient memory to decode additional VOP's before they are presented. If there was limited memory, one of ordinary skill in the art would not have decoded the VOP before presentation and therefore the DTS and PTS would be equal.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-11, 13-19, 21-30, and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radha (US 6,639,943 B1) in view of Tan (US 6,542,549 B1).

As for claims 1, 3-10, and 19, 21-29 Radha teaches of generating a bitstream comprising of one or more base VOPs and also generating a first enhancement bitstream comprising of one or more first enhancement VOPs(Note: One example of coding is to produce base layer frames along with temporal enhancement frames, Column 2, Lines 14-27); wherein the encoding comprises MPEG-4 encoding (Column 5, Line 3); further comprising a second enhancement bitstream with one or more second enhancement VOPs (Note: Two streams of enhancement layer frames are produced including a temporal enhancement streams and a FGS enhancement stream, Column 6, Lines 56-67); the use of fine granularity scalability encoding, wherein the first

enhancement bitstream comprises FGS bitstream and the first enhancement VOPs comprising FGS VOPs (Note: Figure 8D);the second enhancement bitstream comprises FGS temporal scalability bitstream and the second enhancement VOPs comprise FGST VOP's (Note: Figure 8D and Column 6, Lines 56-67); the method further comprising the step of combining the first and second enhancement bitstreams to generate a single bitstream (Column 6, Lines 63-67); the method further comprising of packetizing the base and enhancement bitstream and multiplexing the packetized bitstreams to generate a transport system (Figure 7 and Column 7, Lines 46-61); the base encoder performs discrete cosine transform on the video stream to generate DCT coefficiensts and wherein the DCT coefficients are provided as the processed video data to the enhancement encoder (Figure 7 and Column 7, Lines 38-60). Radha does not teach of time stamping the base and enhancement layers using PTS and DTS and setting the respective PTS's equal along with the DTS of the enhancement to one of the DTS's of the bases; along with setting the DTS and PTS of the second enhancement layer equal to each other (Tan, US 6,542,549 - Figure 6 and Column 7, Lines 11-39); wherein the first DTS is selected to be different from the second DTS's (Tan, US 6,542,549 - Column 6, Lines 9-10); wherein the second DTS associated with each second enhancement VOP represents an interval that is right after the later of the two intervals represented by the two base DTSs associated with its two corresponding base VOPs (Tan, US 6,542,549 - Figure 6 and Column 6, Lines 43-47), however, Tan does. It would have been obvious to one skilled in the art to provided the timing described by Tan to Radha because of the need to be able to evaluate the frames in real time and

over networks where the timestamps could be easily deciphered by the decoder, making for a quicker and more organized deciphering without a high error.

As for Claims 11, 13-18 and 30, 32-38, most of the limitations of these claims have been noted in the above rejection of claims 1, 3-10 and 19, 21-29. The decoder mentioned in claims 11-18 and 30-38 can be fully disclosed by Figure 11 in Radha (US 6,639,943 B1).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen (US 5,886,736) discloses an encoder and decoder system that employs the use of DTSs and PTSs. Suzuki (US 6,567,427) discloses an encoder and decoder system that employs two enhancement layers and a base layer along with VOP dividers used with each.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Haney whose telephone number is (571) 272-7330. The examiner can normally be reached on M-Th (5:30-3:00), Every Other Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Haney
Examiner
Art Unit 2613

mjh

CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600